

## **BURNER**

### **Abstract**

A burner (1) for heat generation, in particular in a gas turbine, is disclosed  
5 as well as a method for the stabilization of the flame of a burner (1). The burner (1)  
comprises inlet openings (3) for a combustion air stream, at least a swirl generator (2) for  
the combustion air stream and one or more first fuel supplies (4) with first fuel outlet  
openings (5) for injection of fuel into the combustion air stream. At least one resonance  
tube (6) with an open (7) and an essentially closed end (8) is arranged in or at the burner  
10 (1), whose closed end (8) is positioned in the region of a flame front (9) which forms  
during operation of the burner (1) on the side of the burner (1). An outlet opening (10) of  
a supply (11) for a compressible medium is arranged at the open end (7) of the resonance  
tube (6). By injection of the compressible medium into the resonance tube (6) when  
flame pulsation occur, the compressible medium periodically enters and leaves the  
15 resonance tube (6) through the open end (7), by which the closed end (8) of the resonance  
tube (6) heats up. This heating up stabilizes the flame.